

WLPCS
Geometry

Name: ANSWER KEY Date: _____ Per.: _____

Unit 1 Review – Day 1

#1.

a.) Name a line that is coplanar with points G and K.

\overleftrightarrow{AB} OR \overleftrightarrow{CD}

b.) Point K is at the intersection between which two objects?

\overleftrightarrow{KF} (line) and Plane J

c.) Name 3 points that are collinear.

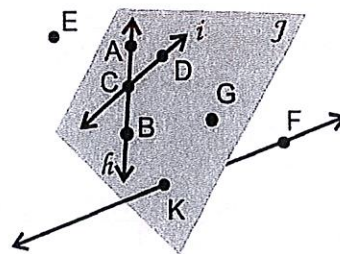
A, C, B

d.) Are A and E collinear?

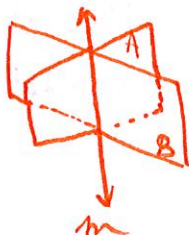
Yes! Any two points are collinear.

e.) Are A, E, and D coplanar?

Yes! Any three pts. are coplanar.



#2. Draw planes A and B that intersect at line m.



#3. For each segment, find a.) the midpoint and b.) the distance.

D(1, 2) E(3, -2)

a.) $\frac{1+3}{2} = 2$

(2, 0) is the midpoint

$\frac{2+(-2)}{2} = 0$

b.)

$\sqrt{(1-3)^2 + (2-(-2))^2}$

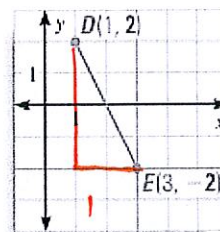
$\sqrt{(-2)^2 + (4)^2}$

$\sqrt{4+16}$
 $\sqrt{20}$

OR

4 \triangle 2
 $4^2 + 2^2 = c^2$
 $16 + 4 = c^2$
 $20 = c^2$

$\sqrt{20} = c$



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#4. For the segment, find a.) the midpoint and b.) the distance.

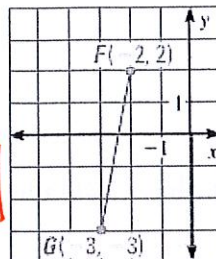
$$F(-2, 2)$$

$$G(-3, -3)$$

$$a) \frac{-2 + -3}{2} = \frac{-5}{2} \text{ OR } -2.5$$

$$\frac{2 + -3}{2} = \frac{-1}{2} \text{ OR } -0.5$$

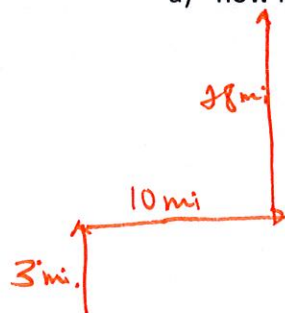
$(-2.5, -0.5)$ Midpoint!



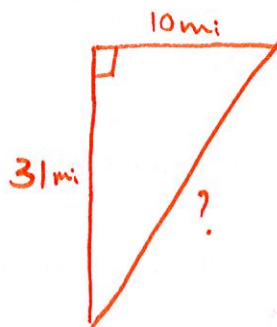
$$b) \sqrt{(-2 - -3)^2 + (2 - -3)^2} = \sqrt{(1)^2 + (5)^2} = \sqrt{1 + 25} = \sqrt{26} \text{ Distance from G to F}$$

#5. If a car drives 3 miles north, then 10 miles east, then 28 more miles north:

a) how far is it (in a straight line) from where it started?



Total: 31 miles north
10 miles east



$$(10\text{mi})^2 + (31\text{mi})^2 = c^2$$

$$100\text{mi}^2 + 961\text{mi}^2 = c^2$$

$$1061\text{mi}^2 = c^2$$

$$32.57\text{mi}$$

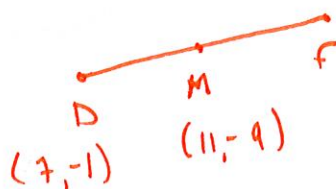
b) what is the total distance traveled by the car?

$$31 + 10 = \boxed{41 \text{ miles}}$$

if the car drove back on the straight line then...

$$41 \text{ miles} + 32.57 \text{ miles} = \boxed{73.57 \text{ miles}}$$

#6. \overline{DF} has midpoint M . If D is at $(7, -1)$ and M is at $(11, -9)$, then find F .



$$F(15, -17)$$

* Not an accurate model! *